REMARKS

Upon entry of the present amendment, claims 1-29 will remain pending in the above-identified application with claims 1, 2, 6-12, 14, 16, 18-20 and 26-29 standing ready for further action on the merits, claims 3-5 remaining withdrawn from consideration due to an earlier Restriction Requirement of the Examiner, and further claims 13, 15, 17, 21-25 were withdrawn from consideration due to election of species.

No claims have been amended in this reply to the Office Action. Accordingly, proper consideration of each of the pending claims (i.e., claims 1, 2, 6-12, 14, 16, 18-20 and 26-29) is respectfully requested at present, as is entry of the present amendment.

Double-Patenting

At page 2 of the Office Action, claims 1, 2, 6-12, 14, 16, 18-20 and 26-29 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 16-21 of co-pending Application No. 10/825,303. Should this co-pending application be allowed, Applicants will file a Terminal Disclaimer in the present application.

Claim Rejections - 35 U.S.C. § 102(a)

At pages 2-3 of the Office Action, claims 1, 2, 6-12, 14, 16, 18-20 and 26-29 have been rejected under 35 USC § 102(b) as being anticipated by Yoshio JP '268 (JP 05-070268)[1].

[1] At page 2, lines 1-2 from the bottom, the Examiner states that "The Examiner has ordered a translation of Yoshio and it will be forwarded to applicant in due course. " However, please note that such a translation has not reached to the Applicants' representative.

Applicants respectfully traverse and request that the Examiner withdraw this rejection.

Distinction over the Cited Reference

As recited at the claims, the present invention is directed to a heat resistant coated member having a rare earth-containing oxide coating. For example, the present invention of claim 1 is a heat resistant coated member comprising; a substrate made of a material selected from the group consisting of Mo, Ta, W, Zr, and carbon; and a coating of rare earth-containing oxide thereon, the rare earth-containing oxide coating including a surface layer having a hardness of at least 50 HV in Vickers hardness.

With respect to Yoshio JP '268, the Examiner states at page 3 of the Office Action, as follows:

> *"Yoshio teaches articles comprising a carbon substrate coated with a first layer comprising a metal, e.g., Mo, Cr, Ti, or W, as presently claimed (abstract). Moreover, Yoshio teaches that the metal containing layer may be coated with other materials. An oral translation of Yoshio indicates that the other material may be formed of metal oxides as recited in the present claims. Accordingly, it is the Examiner's position that the present claims are anticipated by Yoshio."*

However, in fact, Yoshio JP '268 discloses, at the claims thereof at column 1, and paragraph 0013 at columns 3 and 4, as follows:

> Claim 1
>
> A carbon member comprising a carbon material having a metal spray coating layer on the surface thereof,
>
> wherein a spray coating layer of a metal or alloy having a ratio of linear expansion coefficient to carbon of 0.73 to 1.44 and a large chemical affinity to

carbon at the interface, and selected from the group consisting of Cr, Ti, V, W, Mo, Zr, Nb and Ta is formed on the preliminarily blasted surface of the carbon material, and

the metal spray coating layer has an excellent adhesion.

Claim 2

The carbon member of claim 1, wherein a metal having a ratio of linear expansion coefficient of more than 1.44 or a non-metallic compound having a ratio of linear expansion coefficient of less than 0.73 is spray coated on the upper surface of said metal spray coating layer, thereby forming a spray coating multilayer.

Claim 3

The carbon member of claim 1, wherein Ni, Al, Cu, Co or Fe alloy is added to make a mixture state or alloy state to the metal or alloy to be sprayed under such a condition that a ratio of linear expansion coefficient of the material to be sprayed is 1.85 or lower, and a metal spray coating layer is formed by spraying the resulting mixture or alloy to the substrate.

[0013]

The metal and alloy used in the present invention may be easily oxidized by oxygen in the air under a high-temperature spray circumstance. However, since the oxides thereof have a low sublimation temperature (for example, MO_3: 795°C, WO_3: 1,000°C, Nb_2O_5 and Ta_2O_5 are 1,370°C or more), they are readily volatilized in a heat source for spraying such as plasma and combustion gas. Therefore, when the oxides collide to the carbon material (substrate), the oxide film formed on the surface of the metal particle will be minimized, whereby the chemical affinity to the carbon is not lowered and the adhesion of the coating

layer is improved. The few remaining oxide films, which were not volatilized, are eliminated away by the reduction reaction due to carbon broadly speaking.

In short, since a metal oxide layer is eliminated, the substrate of Yoshio JP '268 does not have a metal oxide coating eventually. Thus, the heat resistant coated member of the present invention is distinguished from a member of Yoshio JP '268.

Accordingly, the present invention is not anticipated by Yoshio JP '268.

Based on the forgoing explanation, Applicants respectfully request that the Examiner withdraw this rejection.

Further, a *prima facie* case of obviousness is not established based on the cited reference because Yoshio JP '268 fails to disclose or suggest features of the heat resistant coated member of the present invention. Likewise, it follows that a person having ordinary skill in the art would not be motivated by any of the teachings of the cited reference and by any general acknowledge to arrive at the present invention.

Accordingly, the present invention (claims 1, 2, 6-12, 14, 16, 18-20 and 26-29) is not obvious over the cited reference.

CONCLUSION

Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that each of the pending claims are allowed under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gerald M. Murphy, Jr. (Reg. No. 28,977) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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